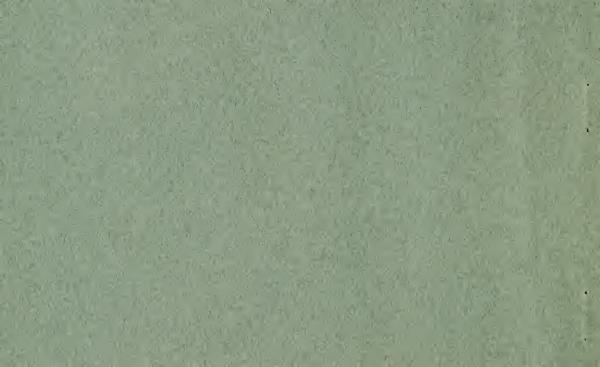
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



PG 1 Badi

U.S. Departs on the Action to the



DIRECTIONS FOR TAKING RUST SURVEY NOTES

Each rust survey slip should indicate the <u>percentage</u> and <u>prevalence of stem rust (P. graminis)</u> and leaf rust (P. <u>triticina</u>) on the various hosts in a given locality.

The "State" and "County" or counties in which the observations were made, and the "Date," and "Nearest Town" should always be recorded.

1

3

name and variety of the cereal host plant and, if possible, the genus and species of grass upon which the rust is found.

In the column headed "Kind of Grain or Grass," record the

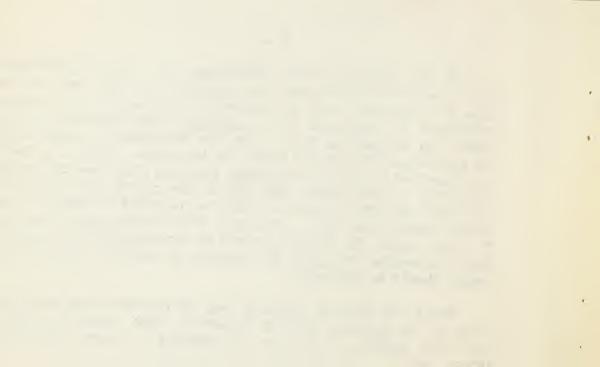
In the column headed "Number Fields Examined," record the number of fields observed.

In the column headed "Stage of Host," record the stage of development of the host using the following symbols; Sl. = Seedling, B. = Boot, J. = Joint, H. = Heading, Fl. = Flower, Milk = Milk, S.D. = Soft Dough, H.D. = Hard Dough, Ma. = Mature. The height of the grain also may be recorded n this column.

		entia.		and the second s	د چید در			
9 4 1	* # ·	or p 0 pm 1	• • • · · · · · · · · · · · · · · · · ·	्रे. व्याप्तीय -च	. —	9 / 10	1	
2.0			de a	and the second second	4 - 3		in the second of	
9		~	^ æ.	্ল কা প্ৰথ	-		er e Lander of Lander Comment of E	
	- 2 · · ·							and the second s

In the columns headed "Percentage of" "Stem Rust" "Leaf Rust," record the percentage and prevalence of each rust in the form of a fraction, with the numerator representing the average percentage of rustiness of an infected plant according to the "Scale for Estimating Rust," and the denominator representing the percentage of infected plants in the field. Thus if a field were examined in which the average infected plant was 5% rusted (according to the scale) and 50% of the plants were infected with stem rust the infection would be recorded as 5/50 in the column headed stem rust. If only a few pustules were found on 4% of the plants the infection would be recorded 2p/4 or trace/4. Negative results are just as valuable as positive results and always should be recorded.

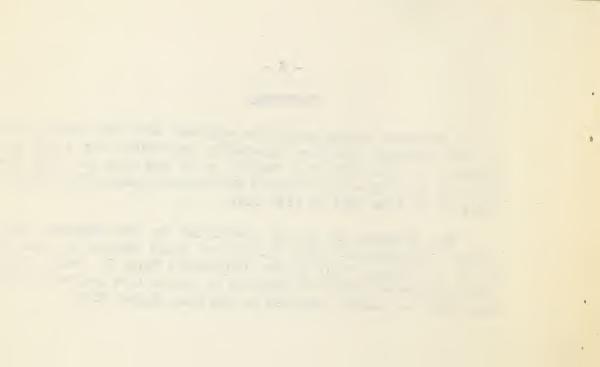
Under the heading "Remarks" may be recorded such observations as the probable date of infection, time required to find the first pustule, variation in severity of rust, estimated damage, etc.



SPECIMENS

A specimen always should be enclosed with the survey slip if the recorded infection apparently represents the first appearance of stem rust in a region, or in any case in which the observer can not be sure without microscopic examination whether the rust is stem rust or leaf rust.

When grasses can not be identified by the observer, specimens including at least one entire plant should be sent to Dr. E. C. Stakman, Rust Survey, University Farm, St. Paul, Minn. These specimens should be numbered in consecutive series by each man, and the numbers recorded on the Rust Survey Slip.



SCALE FOR ESTIMATING RUST.

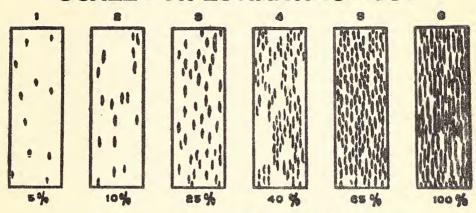


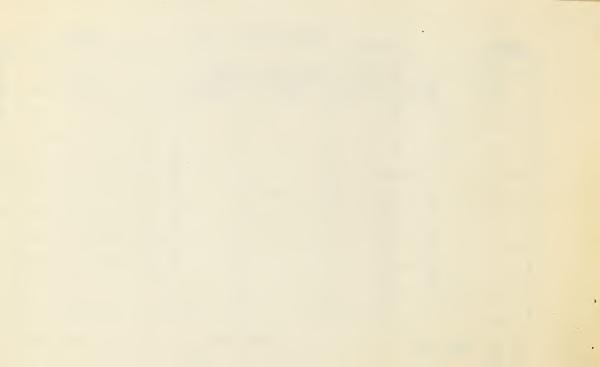
Diagram showing six degrees of rustiness, which may be used in estimating the percentage of rust infection on leaf or stem. The shaded spots represent rust, and the figures represent approximately the rust precentages computed on the basis of the maximum amount of surface covered by rust as shown in the 100 per cent figure. This figure (Ne. 6 in the diagram) represents 37 per cent of actual surface and is arbitrarily selected as 100 percent. Other percentages are in terms of No. 6



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perco	entage Leaf	Remarks
			·		



STATE	Cour	nty Ru	IST SURVE	Town	Date
Host	No. St	age Ru	st perce	entage Leaf	Remarks
	1103. 01	. Hogo	2000	near	
				Odovni 1972 ar 1880 ar 1980 af 1990 af 1990 af 1990 af 1990 ar	
				enter entre en	
-					
Marie and the second					
The state of the s					



STATE	C	ounty	RUST SURV.	EY Town	Date
Host	No.	Stage	Rust perce		Remarks
	No. Stage flds. of host		Stem Leaf		Vener V2
					The second secon



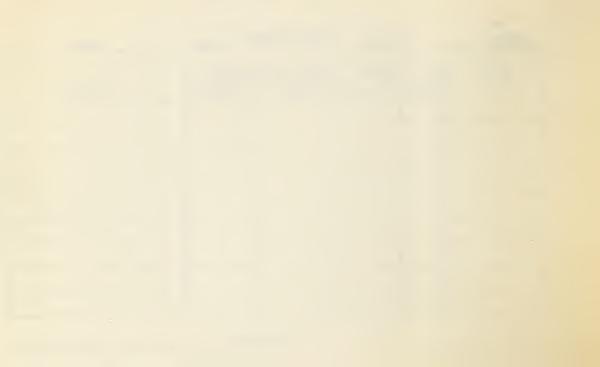
STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage	Rust perco	entage Leaf	Remarks
	11000	01 11030	Doom	near	



STATE	C	ounty	RUST SURV.	EY Town	Date
Host	No.	Stage of host	Rust perce		Remarks
	IIds.	oi host	Stem	Leaf	
the way of the comment of the comment of the composition of the comment of the co					



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage	Rust perc	entage Leaf	Remarks
	1143.	01 11000	5 toli	near	
and the sale of th					
	i.				



	STATE	C	ounty	RUST SURV	EY Town	Date
1						•
1	Host	No. flds.	Stage	Rust perc		Remarks
		flds.	of host	Stem	Leaf	Remarks
				The second secon		
					,	



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage	Rust perc	entage	Remarks
	flds.	of host	Stem	Leaf	Romaz ao

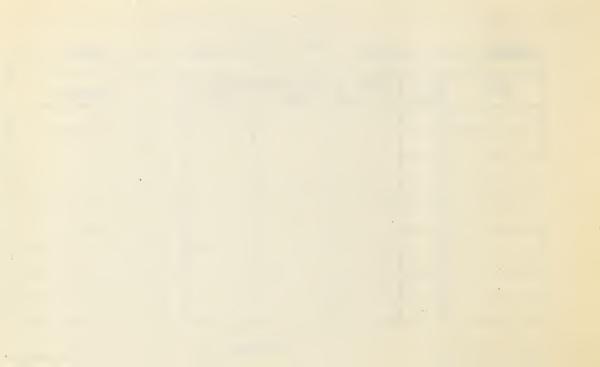
Observer	
----------	--



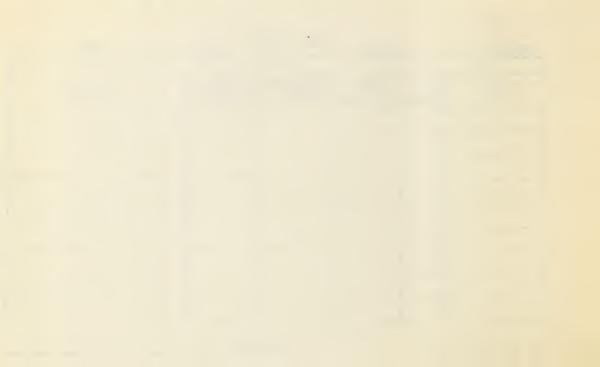
Host	No.	Stage	Rust perce	entage	
nost	flds.	of host	Rust perco	Leaf	Remarks
and the latest and the second					



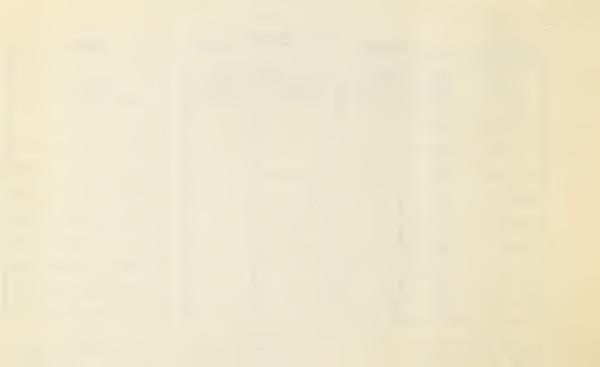
STATE	C	ounty	RUST SURV	EY Town	Date
	aria.	Stage	Rust nerc	enta <i>c</i> e	
Host	flds.	of host	Rust perc	Leaf	Remarks
					Security (New York Control of Con



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage	Rust percentage Stem Leaf		Remarks
	1105.	or nose	2.6411	near	



STATE	Co	unty	RUST SURV	Town	Date
Host	No.	Stage of host	Rust percentage Stem Leaf		Remarks
	IIus.	OI HOSE	2 rem	near	



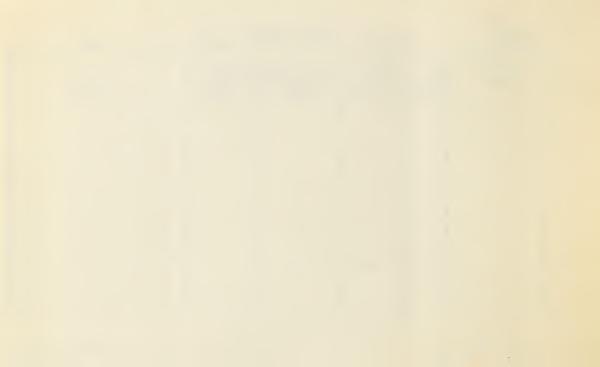
STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perc	entage Leaf	Remarks
				2002	
٠					
		Page Likewania ang Shikara ang pagana			
			,		

Observer	



STATE	County	RUST SUR	VEY Town	Date
Host	No. Stag	Rust perd	entage Leaf	Remarks
	1143. 01 1	1000 Brom	near	

Observer	



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perce		Remarks
	Tlds.	oi nost	Stem	Leaf	
	8				



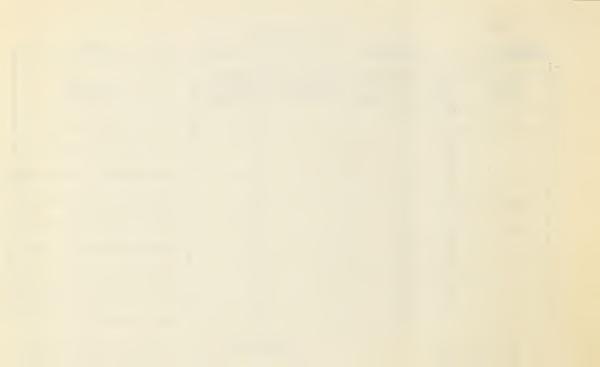
STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perc		Remarks
	flds.	of host	Stem	Leaf	Itolius ito
			articonfinementaristics that Alles II the Alles II show the consequences		



Host	NO.	Stage	Rust perce	entage	
позо	flds.	of host	Rust perce	Leaf	Remarks



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perc		Remarks
	flds.	of host	Stem	Leaf	Memar Ka
		-			
				'	

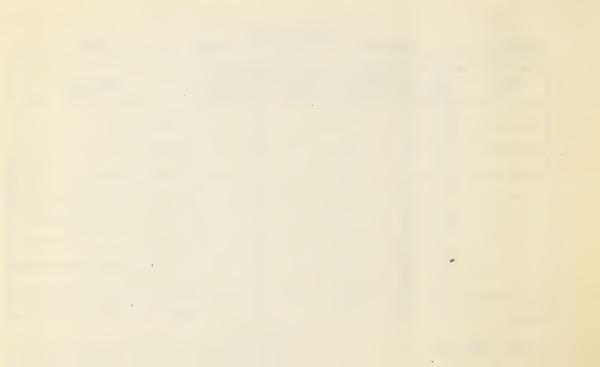


STATE	C	ounty	RUST SURVI	ey Town	Date
Host	No.	Stage	Rust perce	entage	
1036	flds.	of host	Rust percentage t Stem Leaf		Remarks
			######################################	30 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perce	entage	Demanles
	flds.	of host	Stem	Leaf	Remarks
					and the second s

Observer	



1	STATE	C	ounty	RUST SURV	EY Town	Date
	Host	No.	Stage of host	Rust perc	entage Leaf	Remarks
		1143.	01 11000	D VOIII	near	



STATE	Co	unty	RUST SUR	VEY Town	Date
Host	No.	Stage	Rust per		Remarks
	flds.	of host	Stem	Leaf	Itemat Ko



STATE	Co	ounty	RUST SURV	EY Town	Date
Host	No.	Stage of host	Rust perc		Remarks
	IIds.	oi nost	Stem	Leaf	

Observer	



STATE	C	ounty	RUST SURV	EY Town	Date
Host	No.	Stage	Rust perc	entage	Remarks
	flds.	of host	Stem	Leaf	Remarks



STATE	Coun	RUS'	T SURVE	Y Town	Date
Host	No. Stafilds. of	age Rus	t perce	ntage	Domeste
	flds. of	host S	tem	Leaf	Remarks
		Į.	1		
*					





